SYSTEM AND METHOD FOR *UNIVERSAL IDENTIFICATION* OF BIOLOGICAL HUMANS

Specification

UIN (Universal Identity Number):

The objective is to save lives while preventing fraud and eradicating terrorism globally. A UIN shall be issued to all those who apply for it, through a single controlling agency or a combination of several agencies, who work in coordination with each-other so that they all follow the same system and method for issue of UIN, to avoid any redundancy and confusion. Such coordinated efforts of interacting agencies shall organize to reach and cover every human being on the planet in a phased manner.

An access code that is based on the registered name of the applicant and a computer generated alpha-numeric code with year, month and date of issue is given to the applicant. This access code is internally mapped to authenticated data that has been received from the applicant. While the access code acts like the UIN for the applicant, internal mapping of the UIN relates to three separate domains of data. Since the access code is based on just the name and an alphanumeric code, complete privacy is maintained, yet providing the power and flexibility to identify the applicant when needed and provide all relevant information in times of a medical emergency.

The three domains for level of data access are:

1. Public

2. Health

3. Confidential

Public domain relates to a personal web-site of the applicant where they can opt to put any professional and personal information that can help them to reach out to the world. A categorization of inspired or acquired interests and capabilities would be offered for selection that can be viewed and searched by the world to reach and contact the UIN holder for any professional or personal reasons. The applicant has a choice to opt out of this facility. A unique web-site URL and e-mail address can be provided to all those who opt for this service.

Health domain data holds all vital information that can be released to the hospitals or any authorized medical personnel in case of medical emergencies. This would rid the burden on UIN holder to carry all medical records with them and also speed up the process of diagnose and save lives by providing faster treatment. This data is not accessible to the public.

Confidential domain holds the personal data related to the UIN holder that is not available to anyone for access under normal circumstances. Only under certain

circumstances, the authorized law enforcement agencies or the appropriate court order from a specified set of countries or an international court, can request such data. This is the data that establishes undoubted identity of the UIN holder. This data has highest level of access security.

All data can be updated periodically and made accessible at all times to authorized agencies. No one would be entitled to upload or modify the data on-line. The modification shall be done only by the appointed authorities of the controlling agency, upon appropriate verification for authenticity of modifications. This shall prevent any efforts at unauthorized modification.

UIN Card: All applicants shall be issued a UIN card by the appointed controlling agency. This card shall contain the UIN access code and vital life-saving information that can be used by hospitals and authorized medical practitioners under conditions of a medical emergency. For unique identification, picture and thumb print of the applicant are posted on the UIN card.

The data to be collected under different domains is:

Public: Name, contact information viz. telephone, e-mail address, Postal address.

Health: Blood Type, All known allergies with anti-dotes, last treatment and contact details of the treating physician; any special information that is of relevance and medical conditions (can include pointers to other medical record databases), current medications, immunization, any significant past history, details of medical insurance, if any.

Confidential: Name, Surname, Middle name (if any), Maiden name (if any). Date of birth, time of birth, place of birth with complete address. All addresses where resided for over five years. All addresses, where resided within past ten years for periods exceeding six months with reason for move. Details of all identities issued so far: Passports, driving licenses, Social Security Cards, Election ID Cards, Ration Cards, or any others issued or applied for: with details of place, date and authority of issue. Whether any security clearances applied for and were those issued/ rejected. Nationality (current and past, with dates from which switched). Any active or past visas with status. Fingerprints, DNA samples. Pictures (Face: front, side-left, side-right). Pictures (Standing: front, standing-left, standing right). Height, weight, dimensions: chest, waist, hips). Color of hair, eyes and skin. Identification marks, birth marks. Educational and professional qualifications, associations and affiliations with any Religious, Professional and Voluntary bodies or organizations with dates and status held.

Levels of security for data access:

The access code is the preliminary level security access that is known to the UIN holder, but is not displayed on the UIN card. This is to ensure that no one can access their (UIN holder's) data without their knowledge. The authorization code is the security access that is known only to the authorized agencies and can be periodically changed to enable access only to the genuine authorization code holders.

For instance, when an agency is provided with the UIN Number and access code, if that agency is not authorized to get access to the data, they would not be able to get the data (this would happen if they don't have the authorization code) This shall prevent any fraudulent access to the data, thus protecting the identity and privacy of UIN holder. It shall also prevent the UIN holder from playing into the hands of any bogus agency who may be just fooling people around to a trap where they can divulge the sensitive information. All UIN holders would be encouraged to check back on authenticity of the agency seeking information with UIN Controlling Office, to protect their identity.

The confidential data shall not be available on-line, to prevent any potential attempts at hacking. This data shall be maintained only on centralized databases that would be maintained and accessed by authorized personnel at certain locations.

Thus, we can summarize as follows:

Primary Access: UIN

Additional Access Code: UIN Holder

Authorization Code with different access levels: Medical agencies, Law

Enforcement Agencies.

Human Tracking through Identity Confirmation

Once the UIN is issued and the relevant data and DNA samples of the UIN

holder are obtained and stored in a secure environment, this data and samples

can be used to confirm the identity of the person in missing and reported cases.

Scope of the Present Application

Attempts are underway to design and develop a satellite and radio signal based

system that would enable tracking of a UIN Holder in distress or emergency

situation through a tracking device. The tracking device would be linked to UIN

database that would perform periodic updates on the location information. The

present patent application does not cover the Satellite/ Radio based Human

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Tracking System under its scope. An appropriate patent application, making a reference to this application, shall be submitted later to cover the Satellite and radio Signal based Human Tracking System linked to UIN, as and when the design and development for that system has achieved significant progress.

Crime and Terrorism Prevention

Issuing UIN on a global basis shall go a long way in preventing the crime and bring nations together in fight against terrorism. The central controlling agency for issue of UIN shall approach governments of different nations of the world to partner for issue of UIN to their citizens.

Eventually, a LEO (Low Earth Orbit) based satellite tracking system shall be able to track any UIN holder who has been equipped with a tracking device. That is a futuristic plan.

SYSTEM AND METHOD FOR *UNIVERSAL IDENTIFICATION* OF BIOLOGICAL HUMANS

Description

BACKGROUND OF THE INVENTION

[0001] Field of the Invention: Human Identification.

[0002] Present invention relates to a system and method for uniquely identifying biological humans.

BACKGROUND ART

[0003] Currently available systems don't specifically address the issues of a globally available identification mechanism that covers each and every individual on the planet.

[0004] Unique Identification of biological humans is of critical importance. At the same time, data related to the biological human that uniquely identifies, is of a critical nature and must be available upon requirement in the emergency situations to save human life. For example, a particular patient's blood type shall

reveal an important data that can be crucial to saving time for an immediate medical treatment. Also, prior knowledge about allergies can prevent a wrong drug from being administered. In addition, complete confidential data that can be of vital importance for law enforcement agencies must be available at all times for verification and prevention of identity frauds.

[0005] At present, there is no system and method that uniquely identifies a human being on a global basis. Several national initiatives in this regard hold data about individuals in an isolated and disjointed manner. There may or may not be a cross-reference between several identities that a human being may hold. For instance, a Social Security Card may not reference to a driving license number. Also, data pertaining to several numbering schemes can be tapped and used by the fraudulent persons for financial frauds or criminal purposes. If someone is collecting data about a particular person even from the discarded mail, it can be possible for them to figure out a lot of personal information that is of a confidential nature. Subsequently, this information can be used with the intent of fraud. The UIN system is specifically designed to address these issues and prevent attempts at fraud.

[0006] A major problem with all the existing identification systems is that they are not global in nature, but specific only to the organization which develops and implements that particular arrangement or scheme. A particular country may use one identification scheme and an adjoining country may use a completely

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incompatible scheme. As a result, even though the scheme may properly identify the human within the territory of a specific nation, it may provide no usable identification when the human crosses the boundaries and visits another country. With the globalization taking place at a faster pace and the likely merging of nations, like European Union, UIN addresses the need for a technology based global human identification and tracking system.

[0007] Another significant problem with the prior art schemes is that they do not ensure confidentiality and privacy of data about the individual concerned. For example, if a person's social security number is used as the identifier for medical insurance coverage and the medical insurance policy number becomes the SSN suffixed by a zero or some other digit, all correspondence from the medical insurance company for that person will use the same identifier. As a result, the confidential data about the person is prone to be exposed and misused.

[0008] The prior art identifying arrangements and schemes may also permit tampering. For example, a person may provide the forged documents or a wrong social security number or name, while visiting another country (if they are merely seeking it for sake of record keeping). Since there is no existing arrangement of sharing data across the nations, this potential of allowance for error can result in duplicity with other identity belonging to another person having that true number or name or document.

[0009] There is no existing arrangement with any prior art identification scheme to uniquely identify a human being on a global basis, protect the privacy with an optional provision of preserving a DNA sample. Thus, UIN is a unique system and method that overcomes these shortcomings of prior art schemes.

[0010] A system and method for identifying biological humans, that overcomes the above-stated problems and yet retains the confidentiality, is not just desired but essentially required to prevent child abduction, save lives, eliminate identity frauds and eradicate terrorism from the soil of this planet.

SUMMARY OF THE INVENTION

[0011] The present invention is a system and method for uniquely identifying and tracking biological humans, whereby each human being is associated with a universally unique identifier, the UIN (Universal Identification Number). The information associated about the individual that can be referenced with the UIN would be available upon request to authorized medical and law enforcement agencies to deal with emergency situations, saving life of the UIN holder.

[0012] Various levels of access to information that can be made available shall fall under three different domains: public, health and confidential.

[0013] At each level of access, a different authorization code is required. The

authorized medical or law enforcement agency must have access to this code, to get the relevant information about the UIN holder.

[0014] The UIN card, that is issued to the UIN holder, shall contain limited information about the contact details of the individual human being and the emergency medical data. The UIN card would not contain any information that is of a confidential nature. This is to protect privacy of the individual, in case the card is lost by them and falls into the wrong hands.

[0015] The information in public and medical domains shall be stored on-line (the computer database) and made available by calling the UIN providing agency or obtained on-line upon submitting the required access and authorization codes.

[0016] Further features and advantages of the present invention over the prior art will become evident from the detailed description of the invention which follows, when considered with the attached Calculations and Algorithm details.

BRIEF DESCRIPTION OF THE CALCULATION SHEETS AND ALGORITHMS ENCLOSED AS ATTACHMENTS

[0017] Attachment 1 details the Worksheet for calculation of Computer Generated Code Length.

[0018] Attachment 2 details the Algorithm and pseudo-code for issue of the UIN Association date.

ADVANTAGES OF THE INVENTION

[0019] Many advantages are realized using this system and method. The invention provides a system and method for uniquely identifying all the human beings on this planet and the scheme can be universally implemented. Implementation of the method does not require the development of a specific coding scheme by a particular end user, since the unique identifier (UIN) is issued globally by a central coordinating agency. To utilize the system and method of the invention, the end user need not obtain UIN from this coordinating agency, but through the service provider network. The end user needs to only obtain the necessary UIN Card and have access to appropriate information as and when required. The end-user can also request to update or modify the information associated with the UIN in the relevant database, by providing necessary inputs and supporting documents for verification.

Identity theft is the largest growing crime in America, affecting 900,000 new victims each year.

(Source: www.identitytheft.org).

"Ready or not, here it comes: Identity take-over fraud has come into its own, and promises not to go away until significant changes evolve in the manner and methods by which personal identities are collected and used. Consumers would do well to arm themselves with knowledge on how to mend the damages when victimized," says James E. Bauer, Deputy Assistant Director, Office of Investigations, US Secret Service, Washington D.C.

Further, the identifier (UIN) associated with each individual human being can be used to not only to identify the particular individual, but also to provide other information, such as the medical and confidential data to relevant authorized medical and law-enforcement agencies.

[0020] Preventing terrorism and tracing the missing people

In a post-September 11 '2001 world, there is an urgent need to uniquely identify and track each and every single individual human on the planet. If we have such a system in place, tracking individuals on a global basis is possible, cutting across boundaries of the nations. Preventing terrorism and identity frauds is a responsibility for each and every nation of the world, as much as it is for each one of us. Providing a system and method that makes a paradigm shift in the ways we operate and function globally as a society is a crying need of the hour.

We learn of identity frauds that lead to embezzlements worth a fortune. Your mailbox delivers images of several lost kids. Even if you had an identity kit, that would not help much beyond providing a picture of the missing child. The stage has come when we need to make an effective use of technology to protect the lives of our children and their fortunes besides ours. A missing child can be traced when anyone reports the sight and description and data can be matched with UIN database. Furthermore, UIN controlling agency can periodically issue alerts related to all missing UIN holders, seeking the cooperation of a global fraternity as human community to assist in tracing. In the futuristic plan, those opting for a tracking service can be equipped with a device that can be issued to the UIN holder and they can be tracked within a fair range of accuracy by use of satellite and radio based navigation system.

[0021] Identity Insurance

Imagine a situation when your intended heir is traveling abroad and someone who has the relevant information about you and the family poses as your heir to amass wealth by fraud. Life insurance claims can get into wrong hands. Those who truly deserve what was actually theirs would not get it. They may not have the knowledge or resource to waste a lifetime in legal proceedings and fighting court cases. The only right way to rid yourself of such potential nightmares in your life and of those who you leave behind is UIN. It is the technology answer to some of the major problems of humanity. UIN acts like Identity Insurance.

[0022] Preventing Petty Identity Frauds like Credit Card Theft

UIN card holders shall have the potential to get protection against petty thefts when Credit Card companies would be encouraged to perform a verification check of the public domain UIN data of the individual concerned. Since a fraudulent person would not be able to modify the UIN related data, they would get caught. The UIN related data is modified only on verification of a written request and appropriate documents from the UIN holder.

It is like getting the junk food out of the sight of a kid. Our current systems are not designed to handle security. Once new systems based on UIN technology are designed and put in place, it would become increasingly difficult for any one to breach the security.

In the long term plan, UIN Card is also likely to be used as an optional credit card linkage device. It would allow the invocation of a desired credit card by the UIN holder, while simultaneously authenticating the transaction.

[0023] Protecting the Environment

Technology can go a long way to help all of us to protect the environment, create peace and integrate the globe. Imagine that someone has to apply for a visa for a foreign travel. They called the embassy and gave them the UIN Number and access code. If the embassy has an authorization code to get the relevant and authentic data, the visa can be issued even electronically. All the person hours wasted in traveling and the gasoline burnt that pollutes the environment can be saved. It is just a paradigm shift in the way the world works as of today to the ways in which the world would work as of tomorrow. Even the need for a physical embassy building in that country can be eliminated if all business can be transacted electronically. UIN simply helps with a way to achieve that. With an appropriate use of UIN technology and innovative thinking, the possibilities to protect the environment are endless.

[0024] Creation of Peace and Global Integration

UIN shall become a global vehicle to connect people and governments internationally. Just like what Internet did several years ago. This endeavor is towards creating peace, eradicate terrorism, prevent frauds, save lives and integrate the globe. It is eventually an implementation of step by step technology efforts like this that would bring peace to the world and improve the quality of life.

[0025] Futuristic and Unknown Benefits

As of today, it is just the limit of our imagination that guides our perception of the anticipated advantages. Once we get the UIN technology in place, the humanity would be able to extend the cognitive boundaries of our imagination and that would enable the shifting of paradigms. The shift in attitudes from currently fighting for survival to a futuristic collaboration for growth is the turning point in human history that would be marked by UIN. The turning of tables upside down from currently competing to futuristic cooperating and creating. It is ultimately the shift in attitudes, practices, cultures and an unleashing of the hidden creative potential of a global community of humanity that would truly bring out the real benefits of UIN.

Attachment 1: Worksheet for Calculation of Computer Generated Code Length

Existing population of the world that needs to be issued UIN = approx. 7 billion

Existing human birth rate of the world = 6.5 births per second

Human births in the world (highest rate data, with margins) = 10 per second

Human births in the world (highest rate data, with margins) = 10 X 60 per minute

Human births in the world (highest rate data, with margins) = 10 X 60 X 60 per hour

Human births in the world (highest rate data, with margins) = 10 X 60 X 60 X 24 per day

= 864000 births per day

Assuming that every person on the planet was given the same first name (say AAA),

And considering that we use A to Z and 2 to 9 (excluding 0 and 1 to avoid confusion with O and I) that totals to 26 + 7 = 34 alphanumeric characters such that each C (Computer generated Alphanumeric Code) holds the 34 possible options.

$CC = 34 \times 34 = 1156$

$CCC = 34 \times 34 \times 34 = 11256 \times 34 = 39304$

$CCCC = 34 \times 34 \times 34 \times 34 = 39304 \times 34 = 1336336$

Since 1336336 exceeds 864000, an alphanumeric length of 4 characters (CCCC) is sufficient to cover all human births in the world, even if everyone was given the same first name, on any particular day. If this particular day is the UIN issue date, that date would be used as the association date.

To cover the existing 7 billion population of the world, if a particular first name can't be associated with any computer-generated code within the CCCC length limit, the immediately preceding date shall be used as the association date. See the algorithm and pseudo-code sheets for 'Association date Algorithm.'

Attachment 2: Algorithm for UIN Association Date

UIN Issue: pseudo-code for Association Date Algorithm

Example Case: Issue of UIN for a person named Joe on 2002-11-06.

1. Pick current date YYYYMMDD as A (Association date).

2. Suffix YYYYMMDD (A) with NNN (JOE) such that YYYYMMDDNNN is now B

3. Suffix B with CCCC (Computer-generated Code).

4. The whole field is YYYYMMDDNNNCCCC. This is UIN_Temp.

5. If CCCC is PN2R, UIN_Temp is 20021106JOEPN2R.

6. Check if UIN_Temp is already in UIN_Issue list

7. If no, Issue UIN_Temp as UIN_Issue to Joe and add UIN_Temp

(20021106JOEPN2R in this case) to UIN_Issue list

8. If yes, check for availability of another CCCC combination for B and make it

UIN_Temp.

9. Go to 6. Keep repeating the loop of steps 6 through 8 till all possible

combinations of CCCC are exhausted.

10. If there is no CCCC match available for Joe for current date YYYYMMDD (20021106 in this case), decrement current date by 1, such that new Association date (A) is now previous (last used) association date - 1 (200021105 in this case).

11. Go to step 2. Keep repeating the loop of steps 2 through 10, till a valid UIN is found to break away from the loop at step 8 and becomes UIN_Issue for Joe.

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